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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,244	03/02/2004	Jin-Oh Kwag	8071-139T ( OPP 041939US)	9894
7590 F. Chau & Associates, LLC 130 Woodbury Road Woodbury, NY 11797			EXAMINER DUONG, TAI V	
			ART UNIT 2871	PAPER NUMBER
			MAIL DATE 06/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/790,244

Applicant(s)

KWAG ET AL.

Examiner

Tai Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18 and 22 is/are rejected.
- 7) ☒ Claim(s) 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/955,218.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

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A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 06/05/2007 has been entered.

The new sheet of Figs. 10A-10B has been accepted. However, the new sheet of Figs. 11A-11B has *not* been accepted because Figs. 11A-11B are not consistent with Figs. 1, 3, 5 and 6. Figs. 1, 3, 5 and 6 disclose three pixel portions and two openings 81 while Figs. 11A-11B show two pixel portions and one opening.

The objections and the rejections in the last Office action are withdrawn in view of the amendments to the claims and Applicant's remarks.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an

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invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 18 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3 and 13 of U.S. Patent No. 6,700,635. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 3 and 13 of the above patent disclose all the recited features of the instant claim 18. Thus, claim 18 is *anticipated* by claims 3 and 13 of the above patent.

Claim 20 is objected to because the recited phrase "said electrode and *the pixel electrode both include openings*" is not clear. It is noted that claim 18 already recites the pixel electrode having a plurality of openings. Correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al (US 6,573,964) in view of Matsuyama (US 2004/0189914).

Takizawa et al disclose in Fig. 5 a liquid crystal display (LCD) comprising a pixel electrode 1 having a plurality of openings 1A and a plurality of projected portions 10 on the first substrate 20. The only difference between the LCD of

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Takizawa et al and that of the instant claim is outlines of the pixel electrode being curved. Matsuyama discloses in Fig. 2 that the outlines of the pixel electrode can be curved (paragraph 0054). Thus, it would have been obvious to a person of ordinary skill in the art in view of Matsuyama to employ in the LCD of Takizawa et al the outlines of the pixel electrode being curved for reducing generation of disclination, as compared with the outlines of the pixel electrode being rectangular.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takizawa et al and Matsuyama as applied to claim 18 above, and further in view of Sasaki et al (US 6,879,364).

Takizawa et al disclose in Fig. 5 a common electrode 26 formed on a second substrate and a protrusion 11. The only difference between the LCD cited in the above rejection of claim 18 and that of the instant claim is the (common) electrode of the second substrate including openings. Sasaki et al disclose that slits, holes or protrusions can be used as a means for forming the boundary of alignment of the LC molecules (col. 27, lines 40-49). Thus, it would have been obvious to a person of ordinary skill in the art in view of Sasaki et al to employ in the LCD cited in the above rejection of claim 18 the electrode of the second substrate including openings as a means for forming the boundary of alignment of the LC molecules.

Claims 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Claims 20 and 21 are allowed over the prior art of record because none of the prior art discloses or suggests a LCD having structure recited in claim 18 *in combination* with the feature "wherein a shape of each portion of the pixel electrode divided by the openings is substantially a curved rectangle" or "wherein a shape of each portion of the pixel electrode divided by the openings is substantially circular".

Any inquiry concerning this communication should be directed to Tai Duong at telephone number (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

TOAN TON  
PRIMARY PATENT EXAMINER

TVD

06/07